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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,876	07/03/2001	Russell C. Brown	TT3868	2208

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EXAMINER	
NGUYEN BA, HOANG VU A	
ART UNIT	**PAPER NUMBER**
2122	

DATE MAILED: 06/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/898,876	BROWN ET AL.	
	Examiner	Art Unit	
	Hoang-Vu A Nguyen-Ba	2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed July 3, 2001.

2. Claims 1-25 have been examined.

Drawings

3. The drawings filed July 3, 2001 are approved by the examiner.

Specification

4. The title of the invention is not descriptive. A new tittle is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. § 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1, 14 and 15 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1, 14 and 15 are not limited to "a practical application of an abstract idea which produced a useful, concrete, and tangible result." State Street Bank & Trust v. Signature Financial Group, Inc., 149 F. 3d 1368, 1375 n. 9 (Fed. Cir. 1998).

Specifically, the claims are directed to an architecture, a factory system and domain application for integrating data between a plurality of software applications comprising a domain object superclass, a plurality of first-level subclasses of the domain object superclass, a service providing an operation and a domain application. This architecture, factory system and domain application are being interpreted to be

software components, e.g., software program per se. Applicants thus fail to disclose that these software components are tangibly embodied and executed by a piece of hardware and that their functions have practical applications which produce useful, concrete, and tangible results under the State Street Formulation.

On this basis, claims 1, 14 and 15 are rejected under 35 U.S.C. § 101.

Claims 2-13, which depend from claim 1, are therefore rejected for the same reasons.

7. Claims 1, 14 and 15 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1, 14 and 15 are rejected under 35 U.S.C. § 101 based on the theory that theses claims are directed to neither a "process" nor a "machine," nor an "article of manufacture." These claims appear to embrace neither of statutory classes of invention set forth in 35 U.S.C. 101. These claims are not in the technological arts.

Claims 2-13, which depend from claim 1, are therefore rejected for the same reasons.

8. Claim 16 is rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

While the claim is in the technological arts, it is not limited to "a practical application of an abstract idea which produced a useful, concrete, and tangible result." ***State Street Bank & Trust v. Signature Financial Group, Inc., 149 F. 3d 1368, 1375 n. 9 (Fed. Cir. 1998)***.

Specifically, the claim is directed to a method for integrating data between a plurality of software applications comprising providing a domain object superclass, providing first-level sub-classes of the domain object superclass, providing a service

and performing an operation related to the domain object. These method steps do not appear to have practical applications which produce useful, concrete, and tangible results under the State Street Formulation.

On this basis claim 16 is rejected under 35 U.S.C. § 101.

Claims 17-20, which depend from claim 16, are therefore rejected for the same reason.

Correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-25 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 14, 15, 16 and 21 ambiguous, vague and unclear because they recite a ***factory environment***, a ***factory system***, a ***factory***. It is unclear whether the factory as claimed is a physical manufacturing factory or a software application per se. For art rejection purposes, the factory system is interpreted to mean a software application.

Claim 1 recites an ***architecture***. It is unclear what this architecture encompasses. Is this architecture merely software-related or hardware-related or both.

Claims 1, 14, 15, 16 and 21 recite a ***domain object superclass*** and then a ***domain object***. Are these items the same?

Claims 3, 17 and 22 recite, *inter alia*, "enabl[ing]a domain object **to communicate** as if the operation were performed on the domain object." It is unclear with what entity the domain object communicates. Furthermore, it is unclear how significant is the limitation "as if the operation were performed on the domain object?"

Claims 2-13, 17-20 and 22-25, which depend from the independent claims are also rejected under 35 U.S.C. § 112, second paragraph because they incorporate the same deficiencies.

Correction is required.

11. Claims 16, 17, 18, 19, 21, 22, 23 and 24 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 17 (line 8) and 22 (line 9) recite the limitation "the operation on the application-specific domain object". There is insufficient antecedent basis for this limitation in the claim.

Claims 16 (line 10), 18 (lines 6, 7), 19 (lines 2, 3, 4), 21 (lines 10, 11), 23 (line 6), 24 (lines 2, 3, 5, 8) recite the limitation "the operation". There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "the application-specific domain object" at lines 10, 11 and 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 23 recites the limitation "the operation on the data structure" at lines 7 and 11. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 U.S.C. § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C.

§ 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent,
> except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language

13. Claims 1, 14, 15, 16 and 21 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,289,500 to Baxter et al. ("Baxter").

Claims 1, 14, 15, 16 and 21

Baxter discloses at least:

a factory system comprising:

a domain object superclass (see at least Figure 10, "Domain Item Creator" and related discussion in the specification);

a plurality of first-level subclasses of the domain object superclass, an instantiation of one of the plurality of first-level subclasses corresponding to a domain object, the domain object representing an item in a factory (see at least Figure 10, "Extensible Item Factory," "Domain Extension" and related discussion in the specification); *and*

a service, the service providing an operation related to the domain object, the service comprising at least one component, each of the at least one component being operable to perform the operation related to the domain object (see at least Figures 6, 9, 10, "ExtensibleItem" and related discussion in the specification); *and*

a domain application comprising:

an implementation of one component of the at least one component of the service of the factory system to perform the operation related to the domain object (see at least Figure 10, "Domain Extension" and related discussion in the specification).

Claim 2

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the domain application is one of a group consisting of the following:*

a legacy system (see at least Figure 2, "DomainSpecificExtensibleItemFactory"; Figure 5, "PickableOrderItem"; and related discussion in the specification)*; and*

an integrated application (see at least Figure 2, "ExtensibleItemFactory"; Figure 5, "PickableExtension"; and related discussion in the specification).

Claims 3, 17 and 22

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the domain application corresponds to an integrated application comprising:*

a second-level subclass of one first-level subclass of the plurality of first-level subclasses of the domain object superclass of the factory system, an instantiation of the second-level subclass corresponding to an application-specific domain object (see at least Figure 10, "ExtensibleItemCollectionDefault," "ExtensibleItemSpecialFactory" and related discussion in the specification)*; and*

the implementation of the one component corresponds to a method of the application-specific domain object, wherein the method is operable to perform the operation on the application-specific domain object, wherein the performing the operation on the application-specific domain object enables the domain object to communicate as if the

operation were performed on the domain object (see at least Figure 10, "4:createExtensibleItem()," "9:createExtensionItem();" and related discussion in the specification).

Claims 4, 18 and 23

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the domain application corresponds to a legacy system comprising:*

a data structure corresponding to the domain object (see at least *; and*

the implementation of the one component corresponds to an interface to the legacy system, wherein the legacy system is operable to perform the operation on the data structure (see at least Figure 10, "ExtensibleItemCollectionForDomainInterface" and related discussion in the specification).

Claim 5

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the operation comprises a plurality of operations* (see at least Figure 10, "Extension()," "createExtensibleItem()," "getSpecialFactory()," etc., and related discussion in the specification).

Claim 6

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the operation comprises a plurality of services* (see at least Figure 10, "Extension()," "createExtensibleItem()," "getSpecialFactory()," etc., and related discussion in the specification).

Claim 7

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein each component of the at least one component of the service has a corresponding domain application providing an implementation of the component* (see at least Figure 10, "Domain Extension" and related discussion in the specification).

Claims 8, 19 and 24

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein the service includes instructions for selecting, a component of the at least one component to perform the operation, the selecting providing a selected component; and the selected component includes instructions to perform the operation* (see at least Figure 10, step 6: "locateCorrectCollectionUsingExtensionId()" and related discussion in the specification).

Claim 9

The rejection of base claim 1 is incorporated. Baxter further discloses *wherein a component of the at least one component is an interface to the domain application* (see at least Figure 10, "ExtensibleItemCollectionForDomainInterface" and related discussion in the specification).

Claims 10, 20 and 25

The rejection of base claim 1 and intervening claim 9 is incorporated. Baxter further discloses *wherein a requesting component of the at least one component includes instructions to use the interface to request the domain application to provide data to a receiving component of the at least one component; and the receiving component includes instructions to receive the data from the domain application via the interface* (see at least Figure 10,

"ExtensibleItemCollectionForDomainInterface" and related discussion in the specification).

Claim 11

The rejection of base claim 1 and intervening claims 9-10 is incorporated. Baxter further discloses *wherein the receiving component and the requesting component are the same* (see at least Figure 10, "ExtensibleItemSpecialFactory" in step "5:getExtensionId()" and related discussion in the specification).

Claim 12

The rejection of base claim 1 and intervening claims 9-10 is incorporated. Baxter further discloses *wherein the receiving component further includes instructions to perform the operation on the domain object* (see at least Figure 10, "ExtensibleItemSpecialFactory" performing step "6:locateCorrectCollectionUsingExtensionId()" on "Object Environment"; and related discussion in the specification).

Claim 13

The rejection of base claim 1 is incorporated. Baxter further discloses *a system manager for managing hardware and software in the factory* (see at least discussion related to "Framework" in the specification).

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Antony Nguyen-Ba, whose telephone number is (703) 305-0103. The examiner can normally be reached on Tuesday - Friday from 6:15 – 3:45 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam, can be reached at (703) 305-4552.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

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ANTONY NGUYEN-BA
PRIMARY EXAMINER
Art Unit 2122
June 8, 2004